

AVAILABLE BANDWIDTH CONTROL MECHANISM

ABSTRACT OF THE DISCLOSURE

5 An approach for controlling bandwidth allocations for a switching system with transmission constraints is disclosed. A scheduler within a switching system generates bandwidth metrics for a destination site. A traffic control processing logic receives the bandwidth metrics. The traffic control processing logic includes a utilization module that determines utilization associated with the destination site
10 based upon the received bandwidth metrics, and an error calculation module that computes the difference between the determined utilization and a target utilization. A gain and filtering module, which is also a part of the traffic control processing logic, computes a correction value based upon the difference between the determined utilization and the target utilization, in which the correction value being associated
15 with the destination site. Further, the traffic control processing logic includes an adder that outputs a control value based upon a reference control value and the correction value. A bandwidth control processor assigns bandwidth allocation based upon the control value.